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SUITE 1300 MCLEAN, VA 22102			2153	a		
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Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application	n No.	Applicant(s)				
Office Action Summary		09/669,852	2	HORTON, JOHN	J			
		Examiner		Art Unit				
	•	Aaron Stra	inge	2153				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE   - Exte after   - If the   - If NC   - Failu   - Any	ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC misions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the provisions of SIX (6) MONTHS from the mailing date of this communication of the provision of SIX (6) MONTHS from the mailing date of this communication of the provision of SIX (6) MONTHS from the mailing that the provision of SIX (6) MONTHS from the mailing that the provision of SIX (6) MONTHS from the provision of SIX (6) MONTHS from the provision of SIX (6) MONTHS from the mailing that the provision of SIX (6) MONTHS from the mailing date of this communication of SIX (6) MONTHS from the mailing date of this provision of SIX (6) MONTHS from the mailing date of this communication of SIX (6) MONTHS from the mailing dat	ATION. 37 CFR 1.136(a). In no ever nication. days, a reply within the statul tory period will apply and will lil, by statute, cause the applic	nt, however, may a reply be time ory minimum of thirty (30) days expire SIX (6) MONTHS from to cation to become ABANDONED	ely filed will be considered timely the mailing date of this co 0 (35 U.S.C. § 133).				
1)⊠	Responsive to communication(s) filed	on <u>01 April 2003</u> .						
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b	)⊠ This action is no	n-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-45</u> is/are pending in the ap 4a) Of the above claim(s) is/are Claim(s) is/are allowed.  Claim(s) <u>1-45</u> is/are rejected.  Claim(s) <u>2</u> is/are objected to.  Claim(s) are subject to restricti	withdrawn from con						
Application Papers								
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on <u>27 September 2000</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>								
Priority under 35 U.S.C. §§ 119 and 120								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
<ul> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78. <ol> <li>The translation of the foreign language provisional application has been received.</li> </ol> </li> <li>Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>								
Attachmen	nt(s)	-						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)								

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## **DETAILED ACTION**

## Claim Objections

1. Applicant is advised that claim 27 is separated from claim 25 by claim 26, which does not also depend from claim 25. Also, claim 37 is separated from claim 35 by claim 36, which does not also depend from claim 35.

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

2. Claim 2 appears to have a typographical error, "The method of claim 2". Claim 2 appears to depend from claim 1, and has been interpreted as such for the purpose of applying prior art.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbard (US 2001/0056503) in view of Branson et al (US 6,314,512).

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5. With regard to claim 1, Hibbard discloses a method of monitoring the availability of Internet access via a primary interface, comprising the steps of: sending a request (ping) from a computer via a primary interface to which a response is expected; determining if a response (acknowledgement) has been received (Page 2, Paragraph 21). However, Hibbard fails to disclose that the computer is a user computer, the display of a message on the computer indicating that the primary interface is out of service if no response has been received, or that the primary interface utilizes xDSL.

The computer disclosed by Hibbard is a network interface device that provides a gateway for multiple user computers to access the network. Using this method to monitor the connection of a single computer would be equally advantageous, particularly for home users with a single machine. Moving the software to the user computer rather than a gateway eliminates the need for a gateway for a small home network, and it would be obvious to modify this method to use a user computer for monitoring a single connection to the network.

Branson et al. teach the display of a message on a computer to notify the user that a connection has failed (update the GUI) (Branson et al. Col 5, Lines 52-65). After a response has failed to occur, the primary connection is assumed to have failed (Page 2, Paragraph 21). It would be logical at this point to notify the user of the connection failure, and a message display on the computer would be the preferred method.

Hibbard discloses a primary public interface for a public network, such as the Internet, but does not disclose the type of connection used to reach the Internet. The focus of the Hibbard's system is switching to a back up connection in the event the

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primary connection fails. This type of arrangement would be beneficial to any type of primary connection. The use of xDSL as the type of connection would have been obvious to one of ordinary skill in the art since xDSL is well known in the art as a common connection means for both home users and businesses.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to use move the software from the gateway to a user computer to monitor a single connection, notify the user when a connection failure is detected by displaying a message on the computer the user is connecting from, and to use xDSL as the primary connection.

- 6. With regard to claim 2, Hibbard further discloses changing the default modem setting from an xDSL modem to a dial-up modem (Page 2, Paragraph 19).
- 7. With regard to claim 3, Hibbard further discloses connecting to the Internet via the dial-up modem (Page 3, Paragraph 27).
- 8. With regard to claim 4, Hibbard further discloses repeatedly sending the request (Page 2, Paragraph 21).
- 9. With regard to claim 5, Hibbard further discloses that a successive request is sent after a delay of a predetermined amount of time (Page 2, Paragraph 23).
- 10. With regard to claim 6, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to specifically disclose that the predetermined amount of time is in the range of 1 to 10 minutes.

While the reference remains silent on the specific interval between pings, it is

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clear that the interval is variable to allow the user to control the frequency of the connection testing. A smaller delay allows any failures to be detected sooner, but creates more traffic on the network, increasing congestion. Setting the delay between 1 and 10 minutes would allow the user to be notified of a failed connection no longer than 10 minutes after the failure occurs, without generating a significant amount of traffic on the network.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to use a delay between 1 and 10 minutes in order to minimize the amount of network traffic caused by the connection failure detection, while still notifying the user of a failed connection in a reasonable amount of time.

11. With regard to claim 7, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose displaying a message indicating that xDSL service has been restored when a response to the request is received after a response to a previous request was not received.

However, since there is a substantial difference between the performance of xDSL service and dial-up modem service, it would be advantageous to notify the user that xDSL service has been restored when it becomes available. This would allow the user to perform functions that do not work well with dial-up service, such as downloading a large file or viewing streaming video.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to display a message indicating that xDSL service has been restored when a response to the request is received after a response to a

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previous request was not received. This will allow the user to resume activities that may have been suspended due to the reduced performance of dial-up service.

- 12. With regard to claim 8, Hibbard further discloses that the request is a ping command (Page 2, Paragraph 21).
- 13. With regard to claim 9, Hibbard further discloses that the request is directed to a server operated by an xDSL service provider (Page 2, Paragraph 22).
- 14. With regard to claim 10, Hibbard further discloses that the steps are carried out by an applet running on a computer (interface software application) running on a computer (Page 2, Paragraph 19).
- 15. With regard to claim 11, Hibbard further discloses that the applet is at least on of saved in firmware and saved on the hard drive of a computer (software is stored on the device) (Page 2, Paragraph 19).
- 16. With regard to claim 12, it is an inherent part of the system disclosed by Hibbard that the applet is automatically launched when the computer is booted. Hibbard states that the applet (software application) provides the device functionality (Page 2, Paragraph 19). In order for the software to provide the functionality, it must be automatically activated when the computer is booted, or it will not function as disclosed.
- 17. With regard to claim 13, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose that the applet is operative as an active program in a multi tasking operating system.

However, if the applet is moved to the user computer as discussed in claim 1, it would be advantageous to have it operative as an active program in a multi tasking

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operating system. Most user computers utilize multi tasking operating systems such as Microsoft Windows, and the applet would have to be operable in such systems in order to perform as disclosed.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to design the applet such that it is operative as an active program in a multi tasking operating system since most user computers utilize multi tasking operating systems.

18. With regard to claim 14, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose the monitoring dial-up modem connectivity to the Internet and determining therefrom whether xDSL service has failed.

However, since the dial-up connection is the backup connection, it will only be utilized when the primary connection has failed. It is a safe assumption that xDSL has failed for all users utilizing the backup connection. This allows the Internet Service Provider to determine which xDSL connections have failed without requiring the user to contact the ISP directly.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made for the ISP to monitor the dial-up modem connectivity and determine whether xDSL service has failed. This allows the ISP to determine which connections have failed without requiring the user to contact the ISP. This can speed up the process of identifying and repairing problems with the network.

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19. With regard to claim 15, Hibbard discloses periodically sending, via xDSL, a request to which a response is expected; determining if the response has been received; and, if the response has been received, sending a subsequent request after a predetermined delay (Page 2, Paragraph 21). However, Hibbard fails to disclose notifying the user that his xDSL service has failed and automatically offering to the user the option of employing dial-up modem service if no response has been received.

Hibbard discloses that dial-up modem service is automatically employed upon the failure of the primary connection (Page 3, Paragraph 27). Branson et al. teach the display of a message on a computer to notify the user that a connection has failed (update the GUI) (Branson et al. Col 5, Lines 52-65). After a response has failed to occur, the primary connection is assumed to have failed (Page 2, Paragraph 21). It would be logical at this point to notify the user of the connection failure as well as provide the option of connecting via dial-up modem.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to notify the user when a connection failure is detected and provide the option of connecting via a backup connection by displaying a message on the computer the user is connecting from.

- 20. With regard to claim 16, Hibbard further discloses that the request is a ping command (Page 2, Paragraph 21).
- 21. With regard to claim 17, Hibbard further discloses that the ping command is directed to a server belonging to the xDSL provider (Page 2, Paragraph 22).

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22. With regard to claim 18, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to specifically disclose that the predetermined amount of time is in the range of 1 to 10 minutes.

While the reference remains silent on the specific interval between pings, it is clear that the interval is variable to allow the user to control the frequency of the connection testing. A smaller delay allows any failures to be detected sooner, but creates more traffic on the network, increasing congestion. Setting the delay between 1 and 10 minutes would allow the user to be notified of a failed connection no longer than 10 minutes after the failure occurs, without generating a significant amount of traffic on the network.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to use a delay between 1 and 10 minutes in order to minimize the amount of network traffic caused by the connection failure detection, while still notifying the user of a failed connection in a reasonable amount of time.

- 23. With regard to claim 19, Branson et al. further disclose displaying a dialog box as a means for notifying the user (GUI Window) (Branson et al. Col 5, Lines 52-65).
- 24. With regard to claim 20, Hibbard fails to disclose that the dialog box includes buttons.

Including buttons in a dialog box is well known in the art, and are a common method of soliciting user input. Giving the user the option of connecting via a backup connection requires a method of allowing the user to choose which option is desired.

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Buttons are often used to display choices in dialog boxes and the action to take is determined based upon which button is clicked.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to use buttons in the dialog box as a means for determining whether the user wishes to connect via the backup connection in the event of a failure of the primary connection.

25. With regard to claim 21, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose displaying a message indicating that xDSL service has been restored when a response to the request is received after a response to a previous request was not received.

However, since there is a substantial difference between the performance of xDSL service and dial-up modem service, it would be advantageous to notify the user that xDSL service has been restored when it becomes available. This would allow the user to perform functions that do not work well with dial-up service, such as downloading a large file or viewing streaming video.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to display a message indicating that xDSL service has been restored when a response to the request is received after a response to a previous request was not received. This will allow the user to resume activities that may have been suspended due to the reduced performance of dial-up service.

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- 26. With regard to claim 22, Hibbard further discloses that steps (a)-(d) of claim 15 are implemented in software that is operable on a computer (software is stored on the device) (Page 2, Paragraph 19).
- 27. With regard to claim 23, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose detecting if a user uses dial-up service and associating such an event with a failure of xDSL service.

However, since the dial-up connection is the backup connection, it will only be utilized when the primary connection has failed. It is a safe assumption that xDSL has failed for all users utilizing the backup connection. This allows the Internet Service Provider to determine which xDSL connections have failed without requiring the user to contact the ISP directly.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made for the ISP to monitor the dial-up modem connectivity and determine whether xDSL service has failed. This allows the ISP to determine which connections have failed without requiring the user to contact the ISP. This can speed up the process of identifying and repairing problems with the network.

- 28. Claims 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbard (US 2001/0056503).
- 29. With regard to claim 24, Hibbard discloses: sending via a primary connection a request to which a response is expected; determining if a response has been received; and if a response has not been received, establishing a connection to a server via dial-up modem. Hibbard fails to disclose that the primary connection is a xDSL service or

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monitoring the connection via dial-up modem and determining user account information including whether the user is an xDSL service subscriber or customer; and if the user is an xDSL service subscriber or customer, concluding that xDSL service has failed.

Hibbard discloses a primary public interface for a public network, such as the Internet, but does not disclose the type of connection used to reach the Internet. The type of connection is not important, since the focus of the invention is switching to a back up connection in the event the primary connection fails. This type of arrangement would be beneficial to any type of primary connection, and xDSL would be an obvious choice since it is widely used as a broadband Internet connection, and well known in the art.

Monitoring the dial-up connection and determining whether a user is an xDSL subscriber, and concluding xDSL service has failed if a subscriber connects using dial-up service is an obvious addition to the system disclosed by Hibbard. Since the dial-up connection is the backup connection, it will only be utilized when the primary connection has failed. It is a safe assumption that xDSL has failed for all users utilizing the backup connection. This allows the Internet Service Provider to determine which xDSL connections have failed without requiring the user to contact the ISP directly.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to utilize xDSL as the primary connection and monitor the dial-up connections as a method of determining which xDSL connections have failed.

This allows xDSL users to have access to a backup connection and provide the ISP with notification of failed connections without requiring direct notification by end users.

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- 30. With regard to claim 25, Hibbard further discloses generating a trouble ticket indicating xDSL service failure (alarm to system administrator) (Page 3, Paragraph 27).
- 31. With regard to claim 26, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose generating and sending an email to the user informing the user that an xDSL service failure has been detected and is being corrected.

Often, when a service failure occurs, the user will telephone the ISP to notify them of the problem, and the will be told that the problem has been recognized and is being fixed. This time spent on the phone wastes the time of both the ISP and the user. Since the ISP already knows that service has failed when a backup connection has been initiated, it would be advantageous to contact the user via email to inform them that the problem is being corrected. This would notify the user and eliminate the need for a time-consuming telephone call in most cases.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to notify the user via email when a xDSL service failure is detected and inform them that a correcting is underway. This will save time for the ISP and the end user by preventing a large percentage of phone calls inquiring about failed service and could easily be automated as part of the failure detection system.

32. With regard to claims 27 and 28, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose storing a plurality of trouble tickets or subjecting the trouble tickets to a data mining process.

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Storage of trouble tickets and subjecting the tickets to data mining allows the system administrator to monitor the connections of several different users as well as create a log of all connection failures. Data mining the tickets can provide statistics regarding to the reliability of individual connections and the network as a whole. This information is valuable to administrators since it can help identify links that fail frequently and help locate faulty network devices. This information can be used to improve the overall reliability of the network and reduce the amount of time that the backup connection is utilized.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to store trouble tickets from a plurality of users and subject them to data mining in order to generate statistics about the reliability of the network and help the system administrator identify problem areas of the network.

- 33. With regard to claim 29, Hibbard further discloses that the request is a ping command (Page 2, Paragraph 21).
- 34. With regard to claim 30, Hibbard further discloses that software running on a user computer executes at least steps (a)-(c) (software is stored on the device) (Page 2, Paragraph 19).
- 35. With regard to claim 31, Hibbard further discloses that a plurality of requests are sent, each being sent after a predetermined delay (Page 2, Paragraph 23).
- 36. With regard to claim 32, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose notifying the user when xDSL serviced has been restored.

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However, since there is a substantial difference between the performance of xDSL service and dial-up modem service, it would be advantageous to notify the user that xDSL service has been restored when it becomes available. This would allow the user to perform functions that do not work well with dial-up service, such as downloading a large file or viewing streaming video.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to notify the user when xDSL service has been restored. This will allow the user to resume activities that may have been suspended due to the reduced performance of dial-up service.

37. With regard to claim 33, Hibbard discloses a method of maintaining communication with a server, comprising: sending a request from the user computer to the server via a primary connection to which the server should respond; determining if a response has been received; if no response has been received, displaying on the user computer a message indicating that the primary connection has failed and offering to establish communication between the user computer and the server via dial-up modem; and changing the default mode of communication between the user computer and the server to dial-up modem. However, Hibbard fails to disclose that the primary interface utilizes xDSL as the connection means.

Hibbard discloses a primary public interface for a public network, such as the Internet, but does not disclose the type of connection used to reach the Internet. The type of connection is not important, since the focus of the invention is switching to a back up connection in the event the primary connection fails. This type of arrangement

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would be beneficial to any type of primary connection, and xDSL would be an obvious choice since it is widely used as a broadband Internet connection, and well known in the art.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to use xDSL as the primary connection since it is a commonly used broadband internet connection and would benefit from having a backup connection available.

- 38. With regard to claim 34, Hibbard further discloses automatically establishing communication via dial-up modem (Page 1, Paragraph 9).
- 39. With regard to claim 35, Hibbard further discloses changing the default mode of communication back to xDSL service after a dial-up session is complete (primary connection is restored) (Page 2, Paragraph 19).
- 40. With regard to claim 36, Hibbard further discloses that the request is a ping command (Page 2, Paragraph 21).
- 41. With regard to claim 37, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose displaying a message indicating that xDSL service has been restored.

However, since there is a substantial difference between the performance of xDSL service and dial-up modem service, it would be advantageous to notify the user that xDSL service has been restored when it becomes available. This would allow the user to perform functions that do not work well with dial-up service, such as downloading a large file or viewing streaming video.

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Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to display a message indicating that xDSL service has been restored. This will allow the user to resume activities that may have been suspended due to the reduced performance of dial-up service.

- 42. With regard to claim 38, Hibbard further discloses that a plurality of requests are sent, each request being sent after a predetermined delay (Page 2, Paragraph 23).
- 43. Claims 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbard (US 2001/0056503) in view of Branson et al (US 6,314,512).
- 44. With regard to claim 39, Hibbard discloses a monitoring system comprising: a computer; a dial-up modem in communication with the computer; a primary interface in communication with the computer (Page 2, Paragraph 18); and an applet being operable to periodically send, via the primary interface, a request to which a response is expected, determine if the response has been received, send a subsequent request after a predetermined delay if the response has been received (Page 2, Paragraph 21).

Hibbard fails to specifically disclose that the primary interface is an xDSL modem, the applet is operable on a computer within a multi-tasking operating system, the display of a message indicating xDSL service has failed, or offering an option of employing dial-up modem service if no response has been received.

Hibbard discloses a primary public interface for a public network, such as the Internet, but does not disclose the type of connection used to reach the Internet. The type of connection is not important, since the focus of the invention is switching to a back up connection in the event the primary connection fails. This type of arrangement

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would be beneficial to any type of primary connection, and xDSL would be an obvious choice since it is widely used as a broadband Internet connection, and well known in the art.

If the user desires to use this system for a personal computer, it would be advantageous to have it operative as an active program in a multi tasking operating system. Most user computers utilize multi tasking operating systems such as Microsoft Windows, and the applet would have to be operable in such systems in order to perform as disclosed.

Branson et al. teach the display of a message on a computer to notify the user that a connection has failed (update the GUI) (Branson et al. Col 5, Lines 52-65). After a response has failed to occur, the primary connection is assumed to have failed (Page 2, Paragraph 21). It would be logical at this point to notify the user of the connection failure via a message display as well as provide the option of connecting via dial-up modem.

- 45. With regard to claim 40, Hibbard further discloses that a default configuration of the computer is to employ the xDSL modem (primary connection) (Page 2, Paragraph 19).
- 46. With regard to claim 41, Hibbard further discloses that the default configuration of the computer is changed to employ the dial-up modem (backup connection) (Page 2, Paragraph 19).
- 47. With regard to claim 42, Hibbard further discloses that the request is a ping command (Page 2, Paragraph 21).

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- 48. With regard to claim 43, Hibbard further discloses that the ping command is directed to a server belonging to an xDSL service provider (Page 2, Paragraph 22).
- 49. With regard to claim 44, Hibbard further discloses that the applet is at least one of saved in firmware and saved on a hard drive of the computer (software is stored on the device) (Page 2, Paragraph 19).
- 50. With regard to claim 45, while the system disclosed by Hibbard shows substantial features of the claimed invention (discussed above), it fails to disclose the applet displaying a message indicating that xDSL service has been restored.

However, since there is a substantial difference between the performance of xDSL service and dial-up modem service, it would be advantageous to notify the user that xDSL service has been restored when it becomes available. This would allow the user to perform functions that do not work well with dial-up service, such as downloading a large file or viewing streaming video.

Therefore, it would have been obvious to anyone of ordinary skill in the art at the time the invention was made to have the applet be operable to display a message indicating that xDSL service has been restored. This will allow the user to resume activities that may have been suspended due to the reduced performance of dial-up service.

51. With regard to the disclosed invention, please refer to Vicomsoft's Fallback Server overview. Monitoring an Internet connection and switching to a backup connection in the event of a failure is disclosed as a feature in the commercially available product SoftRouter (Page 2, Paragraph 1). While specific details of the

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implementation of Fallback Server are not disclosed in the reference, the basic functionality mirrors that of the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 703-305-8878. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.

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